



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/655,146

09/04/2003

Kimitaka Kawase

075834.00438

6523

33448

7590

11/28/2005

ROBERT J. DEPKE

LEWIS T. STEADMAN

TREXLER, BUSHNELL, GLANGLORGI, BLACKSTONE & MARR

105 WEST ADAMS STREET, SUITE 3600

CHICAGO, IL 60603-6299

EXAMINER

COLON, GERMAN

ART UNIT

PAPER NUMBER

2879

DATE MAILED: 11/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

**Office Action Summary**

Application No.

10/655,146

Applicant(s)

KAWASE ET AL.

Examiner

German Colón

Art Unit

2879

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --****Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-9 is/are rejected.
- 7) ☒ Claim(s) 5 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Amendment*

1. The Amendment, filed on September 15, 2005, has been entered and acknowledged by the Examiner.
2. Addition of claims 5-9 has been entered.

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3 and 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishio et al. (JP 2001-100668) in view of Konuma et al. (US 2002/0030443).

Regarding claims 1 and 8, Nishio discloses a display unit and a method of making the same (see at least Figs. 1 and 6), comprising:

a plurality of drive panels 1-4 arranged and combined to a seal panel 17 with a sealing layer therebetween to form one display screen (see Fig. 1), each of said drive panels being provided with organic EL devices (see Fig. 3, and paragraph [0026]) on a first side facing said seal panel (see Fig. 6); and

a seal material 9 being applied from the opposite side of said drive panel so as to fill in a gap between adjacent two of said plurality of drive panels such that the seal material extends in a horizontal direction beyond the width of the gap so as to cover a portion of the surface of each of

Art Unit: 2879

the adjacent drive panels. Nishio discloses the seal panel 17 being made of glass, but is silent regarding the limitation of light being emitted to the outside from the side of the seal panel. Nishio discloses a downward emission type EL device.

However, Konuma discloses an organic EL device having an upward emission, and teaches this structure to raise the aperture ratio when compared to a downward emission type since the driving means (TFT) do not affect the light extraction, thus resulting in a display having excellent visible properties and broad angle of visibility (see at least paragraphs [0010] and [0158]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide an upward emission EL device to the display of Nishio, with the purpose of increasing the aperture ratio, resulting in a display having excellent visible properties and broad angle of visibility.

Further, it is well documented in the art that either the first electrode or the second electrode of an EL device can be made transparent, depending on the preferred direction of emission, since such arrangement of electrodes has been held as an obvious engineering design.

Regarding claims 2 and 9, Nishio discloses the display comprising a plate-like member 15 stuck at least over said gap portion via said seal material.

Regarding claim 3, Nishio discloses the plate-like member being made from a material having a high thermal conductivity.

Referring to claims 6, Nishio discloses the plate-like member 15 having a solid rectangular shape and covering at least the entire portion of the display unit on which organic EL devices are disposed (see Fig. 6 in view of Fig. 1).

Referring to claim 7, Nishio discloses the seal material covering edge portions of organic EL devices exposed at the edge of each driving panel (see Fig. 6 in view of Figs. 4 or 5).

5. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nishio-Konuma as applied to claim 2 above, and further in view of Kwasnick et al. (US 6,822,389).

Referring to claim 4, Nishio-Konuma discloses the claimed invention except for the limitation of the plate-like member being colored into black. Nishio discloses to include a metallic layer **12** to reduce the uneven appearance of joints between the plurality of panels (see paragraph [0039] ). However, in the same field of endeavor, Kwasnick discloses a display comprised of a plurality of panels and teaches that a black member between the plurality of panels promotes a seamless appearance, resulting in the creation of a visually integrated, composite image made up of the contributions of all the panels and modules (see Col. 1, lines 29-33; and Col. 3, lines 19-21). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the plate-like member colored black, since Kwasnick teaches that a black region between the panels promotes a seamless appearance, resulting in the creation of a visually integrated, composite image made up of the contributions of all the panels and modules.

Further, one having ordinary skills in the art would entertain the idea of providing a dark plate-like member, since the selection of known materials for a known purpose is within the skill of the art, and Nishio teaches the desirability of providing a seamless appearance.

*Allowable Subject Matter*

6. Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter:

The references of the Prior Art of Record fail to teach or suggest the combination of the limitations as set forth in claim 5, and specifically comprising the limitation of the plate-like member being formed in a matrix shape comprising at least two perpendicular intersecting strips, and wherein the width of each strip is substantially the same as the width of the applied seal material.

*Response to Arguments*

8. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

Art Unit: 2879

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to German Colón whose telephone number is 571-272-2451. The examiner can normally be reached on Monday thru Thursday, from 8:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on 571-272-2457. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AC  
gc

  
NIMESHKUMAR D. PATEL  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800